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Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

**Complete If Known**

Application Number	09/980,381
Filing Date	June 1, 2000
First Named Inventor	Huda Y. Zoghbi
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	HO-P01899US3

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
MW	AA	5,929,041-	07-27-1999	Magal	
MW	AB	5,837,881-	11-17-1998	Magal	
MW	AC	5,792,751-	08-11-1998	Ledley et al.	
MW	AD	5,770,580-	06-23-1998	Ledley et al.	

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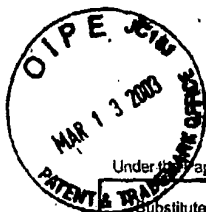
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>2</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
MW	BA	EP-0 613 945-B1	05/03/2000	The General Hospital Corporation		
MW	BB	IB-00/23084-A1	04/27/2000	Kil		
MW	BC	IB-99/42088-A1	08/26/1999	Otogene AG		
MW	BD	IB-99/06034-A1	02/11/1999	Baylor College of Medicine		
MW	BE	IB-99/06064-A1	02/11/1999	Amgen Inc.		
MW	BF	IB-98/19700-A1	05/14/1998	Genentech, Inc.		
MW	BG	IB-98/00014-A1	01/08/1998	The Regents of the University of California		
MW	BH	IB-97/17983-A1	05/22/1997	Cambridge Neuroscience, Inc.		
MW	BI	IB-95/19182-A1	07/20/1995	Baylor College of Medicine		
MW	BJ	IB-98/13048-A1	04/02/1998	Trustees of the University of Pennsylvania		

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See attached Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	3.29.04
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Sheet 2 of 3

PTO/SB/08A (10-01)


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### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.
WMM	CA	Eberl, D. F.; Feeling the vibes: chordotonal mechanisms in insect hearing, Curr Opin Neurobiol 1999 Aug; 9(4):389-393
	CB	Akazawa, C., et al.; A mammalian helix-loop-helix factor structurally related to the product drosophila proneural gene atonal is a positive transcriptional regulator expressed in the developing nervous system, The Journal of Biological Chemistry; 04/14/95, pp. 8730-8738, Vol. 270, No. 15, The American Society of Biochemistry & Molecular Biology, Inc.
	CC	Sun, Y, et al.; Transcriptional regulation of atonal during development of the drosophila peripheral nervous system, Development 125, 1998, pp. 3731-3740, The Company of Biologists Limited, Great Britain
	CD	Jarman, A. P., et al.; Atonal is a proneural gene that directs chordotonal organ formation in the drosophila peripheral nervous system, Cell, 07/02/93, pp. 1307-1321, Vol. 73, Cell Press
	CE	Hassan, B. A., et al.; Doing the math: is the mouse a good model for fly development? Genes & Development, 2000, pp. 1852-1865, Vol. 14, Cold Spring Harbor Laboratory Press
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	CG	Ben-Arie, N., et al.; Math 1 is essential for genesis of cerebellar granule neurons, Nature, 11/13/97, pp. 169-172, Vol. 390
	CH	Sabate, O., et al.; Adenovirus for Neurodegenerative diseases: in vivo strategies & ex vivo gene therapy using human neural progenitors, Clinical Neuroscience, 1996, pp. 317-321, Vol. 3, especially p. 317, rt. col., and p. 318, left col.
	CI	Williams, D. P., et al.; Structure/Function analysis of Interleukin-2-toxin (DAB486-IL-2), fragment B Sequences required for the delivery of fragment A to the cytosol of target cells, J. Biol. Chem., 07/15/90, pp. 11885-11887, Vol. 265, No. 20
	CJ	Chien, C-T, et al.; Neuronal type information encoded in the basic-helix-loop-helix domain of proneural genes, Proc. Natl. Acad. Sci. USA, Nov. 1996, pp. 13239-13244, Vol. 93, especially pp. 13239-13240
	CK	Schwarze, S. R., et al.; In vivo protein transduction: delivery of a biologically active protein into the mouse, Science, 09/03/99, pp. 1569-1573, Vol. 285, see entire document
	CL	Verma, I. M., et al.; Gene therapy-promises & prospects, Nature, 09/18/97, pp. 239-242, Vol. 389, see entire document
	CM	Ledley, F. D.; Pharmaceutical approach to somatic gene therapy, Pharmaceutical Research, Nov. 1996, pp. 1595-1614, Vol. 13, No. 11, see entire document
	CN	Chen, P., Johnson, J. E., et al.; The role of Math 1 in inner ear development; Uncoupling the establishment of the sensory primordium from hair cell fate determination, Development, 2002, pp. 2495-2505, Vol. 129
	CO	Kanzaki, S., Kawamoto, K., et al.; From Gene Identification to Gene Therapy, Audiol. Neurotol., 2002, pp. 161-164, Vol. 7
	CP	Kawamoto, K., Oh, S. H., et al.; The Functional and Structural Outcome of Inner Ear Gene Transfer via the Vestibular and Cochlear Fluids in Mice, Molecular Therapy, Vol. 4 (6): 575 - 585, December 2001
WMM	CQ	Zheng, J. L., et al.; Overexpression of Math1 induces robust production of extra hair cells in postnatal rat inner ears; nature Neuroscience, Jun. 2000, pp. 580-586, Vol. 3, No. 6, Nature America Inc.

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Sheet	3	of	3	Attorney Docket Number	HO-P01899US3
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### Complete If Known

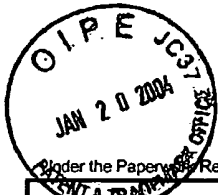
Application Number	09/980,381
Filing Date	June 1, 2000
First Named Inventor	Huda Y. Zoghbi
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	HO-P01899US3

CR	Bermingham, N.A., et al.; Math1: an essential gene for the generation of inner ear hair cells, Science, 06/11/99, pp. 1837-1841, Vol. 284, American Assoc. for the Advancement of Science
CS	Ben-Arie, N., et al.; Functional conservation of atonal and Math1 in the CNS & PNS, Development, 2000, pp. 1039-1048, Vol. 127, The Company of Biologists Limited, Great Britain
CT	Ben-Arie, N., et al.; Evolutionary conservation of sequence & expression of the bHLH protein Atonal suggests a conserved role in neurogenesis, Human Molecular Genetics, 1996, pp. 1207-1216, Vol. 5, Oxford Univ. Press
CU	Jarman, A. P., et al.; Atonal is the proneural gene for Drosophila photoreceptors, Nature, 06/02/94, pp. 398-400, Vol. 369
CV	Kim, P., et al.; XATH-1, a vertebrate homolog of Drosophila atonal, induces neuronal differentiation within ectodermal progenitors, Developmental Biology, Article D8978572, 1997, pp. 1-12, Vol. 187, Academic Press
CW	Ben-Arie, N., et al.; Abnormal cerebellar development in mice lacking the murine homolog of the Drosophila proneural gene atonal, American J. Human Genetics, 1996, Vol. 59, No. 4, Suppl. p. A46, Abstract #232, see abstract

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

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Sheet	1	of	1	Attorney Docket Number	HO-P01899US3

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Schwab, Markus, H., et al.; Neuronal Basic Helix-Loop-Helix Proteins (NEX, neuroD, NDRF): Spatiotemporal Expression and Targeted Disruption of the NEX Gene in Transgenic Mice, The Journal of Neuroscience (February 15, 1998), OE(4), pp. 1408-1418.	
	CB	Brown, Nadean L., et al.; Math5 encodes a murine basic helix-loop-helix transcription factor expressed during early stages of retinal neurogenesis, Development (November 9, 1998), Vol. 125, pp. 4821-4833.	

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25376575.1 Examiner		Date Considered	3.29.04
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